Fax:23698454 Jun 1 '05 17:53 P. 07/12 Exhibit A 茂德科技(股)公司 ProMOS TECHNOLOGIES, INC 記錄保存年限: 对應規範號碼: 表爪號邸: REV: FGRAX-0005 FGSAX-0002 August/12:2001 ProMOS IP COMMITTEE 舉 請 單 明 INVENTION DISCLOSURE 2030 本平填寫完成時為沒德科技(股)公司的保密財產 ProMOS CONFIDENTIAL WHEN 1. 爱明中华人 INVENTOR(S) 中久/系文母名 NAME 兵工代流 Emp. NO 研發已錄彈流及資北Lab.Notebook notispage 年門代眾 DEPARTMENT 关兆爵/Joseph Wu P1634 A672 2. 登明名明 TITLE OF THE INVENTION Localised side wall implant & Local channel stop implant methods 3. 主要被断思考 MAIN IDEA OF THE INVENTION Blanket SW implant is current scheme to improve device short channel/ narrow width effects, or channel state Through simple processes, we can selectively to localise dosage at surface or trech bottom. 4. 保明使用实况 INVENTION STATUS

V. 尚未使用 UNUSED □ 件表验文 PUBLICATION 🔲 企四及示 DEMO ☐ 数数 SEUL □ 数据标题 TRANSFER

5. 奈明仏接濟共**及ECONOMIC BENEFTE OF THE INVENTION** 景明的黄胞状况 ▼ 哥哥中DEVELOPMENT □ 就是中PILOT RUN

管明的价金套的潜在彩罩(未获明后用的灰品/技術及男童委性)POTENTIAL BUSINESS IMPACT:

6. 登明三届村印刷(OWENERSHIP OF THE INVENTION)

成斯上的景明(within job scope) 走出計畫(Project Name) ♥ 職務無關的發明(outside job scape)

養名 SIGNATURE 於明人 INVENTOR ROTIONAVAL A 神免

6 向 DATE 2 公司人 INVENTOR 9 # DATE 安秀人 INVENTOR

□ 新 DATB 8 和 DATE

右见姓人已回馈丝赊解本僚明之内容 WITNESSES HAVE READ AND UNDERSTAND THE ENTIRE DISCLOSURE

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淡导页均须受明人及见验人签名Each page should be signed by inventors and witnesses

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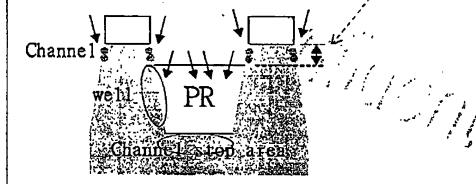
#### ProMOS IP COMMITTEE ACTIVITY

## How to localize SW // only at desired area?

Localized SW implant process flow-

- Calculate the best 1/1 condition, to get "PR recess depth" target @ SW
- O. After Active Area RTO
- 1. PR conting & PR recess, to the target depth
- 2. PR hard bake (to harden PR during next SW lithograph)
- 3. SW I/I photo
- 4. SW 1/1
- 5. PR remove

=> No dosage a well & trench horizon area. No SW Mkide effect to be considered?



	<b>蚕</b> 龙	SIGNATURE		
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Localized channel-stop implant process flow-

- \* Calculate the best I/i condition according to
  - Channel stop dosage requirement at trench bottom
  - STI taper angle
  - => Decide thickness target of CVD ox as "SW mask layer" which will make no dose at SW Si after ox removed!
- 0. Before Active Area RTO
- I. Mask CVI) ox deposition
- 2. Channel Stop lithograph & 1/1
- 3. PR remove
- 4. CVD ox remove

=> All dosage @ french hottom. No SW i/i side effect flothe considered!

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## ProMOS IP COMMITTEE ACTIVITY

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